

AMENDMENTS TO THE CLAIMS

1 1. (Currently Amended) In a system comprising at least one application and a
2 framework, a method performed by the framework comprising:
3 receiving a request from the application for a customized implementation of a
4 service;
5 determining a set of zero or more restrictions to be imposed upon said customized
6 implementation;
7 dynamically constructing said customized implementation, said customized
8 implementation incorporating said restrictions, and comprising
9 enforcement logic for enforcing said restrictions; and
10 providing said customized implementation to the application;
11 wherein said customized implementation is invocable by the application without
12 further interaction with the framework; and
13 wherein determining the set of zero or more restrictions comprises:
14 accessing information specifying one or more limitations;
15 determining permissions, if any, granted to the application; and
16 reconciling said limitations and said permissions to derive said
17 restrictions.

1 2. (Canceled)

1 3. (Original) The method of claim 1, wherein the system further comprises a general
2 implementation for said service, wherein said general implementation is
3 unrestricted, and wherein said customized implementation further incorporates
4 said general implementation.

- 1 4. (Original) The method of claim 3, wherein said enforcement logic enforces said
2 restrictions on said general implementation.
- 1 5. (Original) The method of claim 1, wherein said enforcement logic is invoked
2 upon initialization of said customized implementation.
- 1 6. (Currently Amended) The method of claim 5, wherein said enforcement logic,
2 when invoked:
3 receives a set of desired parameters from the application;
4 determines whether the desired parameters exceed said restrictions; and
5 in response to a determination that the desired parameters exceed said restrictions,
6 ~~preventing~~ prevents said customized implementation from operating.
- 1 7. (Currently Amended) The method of claim 5, wherein said service is an
2 encryption/decryption service, and wherein said enforcement logic, when
3 invoked:
4 determines whether a particular exemption mechanism has been invoked; and
5 in response to a determination that the particular exemption mechanism has not
6 been invoked, ~~preventing~~ prevents said customized implementation from
7 operating.
- 1 8. (Canceled)
- 1 9. (Currently Amended) The method of claim [[8]]1, wherein said service is an
2 encryption/decryption service, and wherein said information comprises a set of
3 one or more default encryption limitations.

1 10. (Original) The method of claim 9, wherein said default encryption limitations are
2 derived by merging multiple jurisdiction policies and extracting therefrom the
3 most restrictive encryption limitations.

1 11. (Canceled)

1 12. (Currently Amended) The method of claim [[11]]1, wherein said limitations and
2 said permissions are reconciled to derive restrictions which are least restrictive.

1 13. (Currently Amended) The method of claim [[11]]1, wherein said service is an
2 encryption/decryption service, and wherein said information comprises a set of
3 one or more default encryption limitations, and a set of zero or more exempt
4 encryption limitations which apply when one or more exemption mechanisms are
5 implemented.

1 14. (Original) The method of claim 13, wherein said default encryption limitations
2 and said exempt encryption limitations are derived by merging multiple
3 jurisdiction policies and extracting therefrom the most restrictive encryption
4 limitations.

1 15. (Original) The method of claim 13, wherein reconciling said limitations and said
2 permissions comprises:
3 determining whether the application has been granted any permissions; and
4 in response to a determination that the application has not been granted any
5 permissions, deriving said restrictions from said set of default encryption
6 limitations.

1 16. (Original) The method of claim 13, wherein reconciling said limitations and said
2 permissions comprises:
3 determining whether the application has been granted any permissions which
4 require implementation of a particular exemption mechanism;
5 in response to a determination that the application has been granted a permission
6 which requires implementation of a particular exemption mechanism,
7 determining whether said exempt encryption limitations allow said
8 particular exemption mechanism to be implemented; and
9 in response to a determination that said exempt encryption limitations allow said
10 particular exemption mechanism to be implemented, deriving said
11 restrictions from said set of exempt encryption limitations.

1 17. (Original) The method of claim 1, wherein the system further comprises a general
2 implementation for said service, and wherein dynamically constructing said
3 customized implementation comprises:
4 instantiating the general implementation to give rise to a general implementation
5 instance;
6 instantiating a wrapper object; and
7 encapsulating said general implementation instance and said restrictions within
8 said wrapper object to derive said customized implementation.

1 18. (Original) The method of claim 17, wherein said wrapper object comprises one or
2 more invocable methods, wherein said general implementation instance comprises
3 one or more invocable methods, and wherein encapsulating comprises:
1 mapping one or more of the invocable methods of said wrapper object to one or
2 more of the invocable methods of said general implementation instance.

1 19. (Original) The method of claim 18, wherein said wrapper object comprises
2 initialization logic for enforcing said restrictions on said general implementation
3 instance.

1 20. (Original) The method of claim 19, wherein said initialization logic is invoked
2 prior to allowing any of the invocable methods of said general implementation
3 instance to be invoked.

1 21. (Original) The method of claim 17, further comprising:
2 instantiating an exemption mechanism to give rise to an exemption mechanism
3 instance; and
4 encapsulating said exemption mechanism instance within said wrapper object.

1 22. (Currently Amended) In a system comprising at least one application, a
2 framework comprising:
3 a mechanism for receiving a request from the application for a customized
4 implementation of a service;
5 a mechanism for determining a set of zero or more restrictions to be imposed
6 upon said customized implementation;
7 a mechanism for dynamically constructing said customized implementation, said
8 customized implementation incorporating said restrictions, and comprising
9 enforcement logic for enforcing said restrictions; and
10 a mechanism for providing said customized implementation to the application;
11 wherein said customized implementation is invocable by the application without
12 further interaction with the framework; and
13 wherein the mechanism for determining the set of zero or more restrictions
14 comprises:

a mechanism for accessing information specifying one or more
limitations;
a mechanism for determining permissions, if any, granted to the
application; and
a mechanism for reconciling said limitations and said permissions to
derive said restrictions.

1 23. (Canceled)

1 24. (Original) The framework of claim 22, wherein the system further comprises a
2 general implementation for said service, wherein said general implementation is
3 unrestricted, and wherein the mechanism for dynamically constructing said
4 customized implementation further incorporates said general implementation
5 within said customized implementation.

1 25. (Original) The framework of claim 24, wherein said enforcement logic enforces
2 said restrictions on said general implementation.

1 26. (Original) The framework of claim 22, wherein said enforcement logic is invoked
2 upon initialization of said customized implementation.

1 27. (Currently Amended) The framework of claim 26, wherein said enforcement
2 logic, when invoked:
3 receives a set of desired parameters from the application;
4 determines whether the desired parameters exceed said restrictions; and
5 in response to a determination that the desired parameters exceed said restrictions,
6 ~~preventing~~ prevents said customized implementation from operating.

1 28. (Currently Amended) The framework of claim 26, wherein said service is an
2 encryption/decryption service, and wherein said enforcement logic, when
3 invoked:
4 determines whether a particular exemption mechanism has been invoked; and
5 in response to a determination that the particular exemption mechanism has not
6 been invoked, ~~preventing~~ prevents said customized implementation from
7 operating.

1 29. (Canceled)

1 30. (Currently Amended) The framework of claim ~~[[29]]~~22, wherein said service is an
2 encryption/decryption service, and wherein said information comprises a set of
3 one or more default encryption limitations.

1 31. (Original) The framework of claim 30, wherein said default encryption limitations
2 are derived by merging multiple jurisdiction policies and extracting therefrom the
3 most restrictive encryption limitations.

1 32. (Canceled)

1 33. (Currently Amended) The framework of claim ~~[[32]]~~22, wherein said limitations
2 and said permissions are reconciled to derive restrictions which are least
3 restrictive.

1 34. (Currently Amended) The framework of claim ~~[[32]]~~22, wherein said service is an
2 encryption/decryption service, and wherein said information comprises a set of
3 one or more default encryption limitations, and a set of zero or more exempt

4 encryption limitations which apply when one or more exemption mechanisms are
5 implemented.

1 35. (Original) The framework of claim 34, wherein said default encryption limitations
2 and said exempt encryption limitations are derived by merging multiple
3 jurisdiction policies and extracting therefrom the most restrictive encryption
4 limitations.

1 36. (Original) The framework of claim 34, wherein the mechanism for reconciling
2 said limitations and said permissions comprises:
3 a mechanism for determining whether the application has been granted any
4 permissions; and
5 a mechanism for deriving, in response to a determination that the application has
6 not been granted any permissions, said restrictions from said set of default
7 encryption limitations.

1 37. (Original) The framework of claim 34, wherein the mechanism for reconciling
2 said limitations and said permissions comprises:
3 a mechanism for determining whether the application has been granted any
4 permissions which require implementation of a particular exemption
5 mechanism;
6 a mechanism for determining, in response to a determination that the application
7 has been granted a permission which requires implementation of a
8 particular exemption mechanism, whether said exempt encryption
9 limitations allow said particular exemption mechanism to be implemented;
10 and

11 a mechanism for deriving, in response to a determination that said exempt
12 encryption limitations allow said particular exemption mechanism to be
13 implemented, said restrictions from said set of exempt encryption
14 limitations.

1 38. (Original) The framework of claim 22, wherein the system further comprises a
2 general implementation for said service, and wherein the mechanism for
3 dynamically constructing said customized implementation comprises:
4 a mechanism for instantiating the general implementation to give rise to a general
5 implementation instance;
6 a mechanism for instantiating a wrapper object; and
7 a mechanism for encapsulating said general implementation instance and said
8 restrictions within said wrapper object to derive said customized
9 implementation.

1 39. (Original) The framework of claim 38, wherein said wrapper object comprises
2 one or more invocable methods, wherein said general implementation instance
3 comprises one or more invocable methods, and wherein the mechanism for
4 encapsulating comprises:
5 a mechanism for mapping one or more of the invocable methods of said wrapper
6 object to one or more of the invocable methods of said general
7 implementation instance.

1 40. (Original) The framework of claim 39, wherein said wrapper object comprises
2 initialization logic for enforcing said restrictions on said general implementation
3 instance.

1 41. (Original) The framework of claim 40, wherein said initialization logic is invoked
2 prior to allowing any of the invocable methods of said general implementation
3 instance to be invoked.

1 42. (Original) The framework of claim 38, further comprising:
2 a mechanism for instantiating an exemption mechanism to give rise to an
3 exemption mechanism instance; and
4 a mechanism for encapsulating said exemption mechanism instance within said
5 wrapper object.

1 43. (Currently Amended) In a system comprising at least one application, a computer
2 readable medium having stored thereon instructions which, when executed by one
3 or more processors, cause the one or more processors to implement a framework
4 which dynamically constructs a customized implementation of a service, said
5 computer readable medium comprising:
6 instructions for causing one or more processors to receive a request from the
7 application for a customized implementation of a service;
8 instructions for causing one or more processors to determine a set of zero or more
9 restrictions to be imposed upon said customized implementation;
10 instructions for causing one or more processors to dynamically construct said
11 customized implementation, said customized implementation
12 incorporating said restrictions, and comprising enforcement logic for
13 enforcing said restrictions; and
14 instructions for causing one or more processors to provide said customized
15 implementation to the application;

16 wherein said customized implementation is invocable by the application without
17 further interaction with the framework;
18 wherein the instructions for causing one or more processors to determine the set
19 of zero or more restrictions comprise:
20 instructions for causing one or more processors to access information
21 specifying one or more limitations;
22 instructions for causing one or more processors to determine permissions,
23 if any, granted to the application; and
24 instructions for causing one or more processors to reconcile said
25 limitations and said permissions to derive said restrictions.

1 44. (Canceled)

1 45. (Original) The computer readable medium of claim 43, wherein the system further
2 comprises a general implementation for said service, wherein said general
3 implementation is unrestricted, and wherein said customized implementation
4 further incorporates said general implementation.

1 46. (Original) The computer readable medium of claim 45, wherein said enforcement
2 logic enforces said restrictions on said general implementation.

1 47. (Original) The computer readable medium of claim 43, wherein said enforcement
2 logic is invoked upon initialization of said customized implementation.

1 48. (Currently Amended) The computer readable medium of claim 47, wherein said
2 enforcement logic, when invoked:
3 receives a set of desired parameters from the application;
4 determines whether the desired parameters exceed said restrictions; and

5 in response to a determination that the desired parameters exceed said restrictions,
6 ~~preventing~~ prevents said customized implementation from operating.

1 49. (Currently Amended) The computer readable medium of claim 47, wherein said
2 service is an encryption/decryption service, and wherein said enforcement logic,
3 when invoked:
4 determines whether a particular exemption mechanism has been invoked; and
5 in response to a determination that the particular exemption mechanism has not
6 been invoked, ~~preventing~~ prevents said customized implementation from
7 operating.

1 50. (Canceled)

1 51. (Currently Amended) The computer readable medium of claim ~~[[50]]~~43, wherein
2 said service is an encryption/decryption service, and wherein said information
3 comprises a set of one or more default encryption limitations.

1 52. (Original) The computer readable medium of claim 51, wherein said default
2 encryption limitations are derived by merging multiple jurisdiction policies and
3 extracting therefrom the most restrictive encryption limitations.

1 53. (Canceled)

1 54. (Currently Amended) The computer readable medium of claim ~~[[53]]~~43, wherein
2 said limitations and said permissions are reconciled to derive restrictions which
3 are least restrictive.

1 55. (Currently Amended) The computer readable medium of claim ~~[[53]]~~43, wherein
2 said service is an encryption/decryption service, and wherein said information

3 comprises a set of one or more default encryption limitations, and a set of zero or
4 more exempt encryption limitations which apply when one or more exemption
5 mechanisms are implemented.

1 56. (Original) The computer readable medium of claim 55, wherein said default
2 encryption limitations and said exempt encryption limitations are derived by
3 merging multiple jurisdiction policies and extracting therefrom the most
4 restrictive encryption limitations.

1 57. (Original) The computer readable medium of claim 55, wherein the instructions
2 for causing one or more processors to reconcile said limitations and said
3 permissions comprises:
4 instructions for causing one or more processors to determine whether the
5 application has been granted any permissions; and
6 instructions for causing one or more processors to derive, in response to a
7 determination that the application has not been granted any permissions,
8 said restrictions from said set of default encryption limitations.

1 58. (Original) The computer readable medium of claim 55, wherein the instructions
2 for causing one or more processors to reconcile said limitations and said
3 permissions comprises:
4 instructions for causing one or more processors to determine whether the
5 application has been granted any permissions which require
6 implementation of a particular exemption mechanism;
7 instructions for causing one or more processors to determine, in response to a
8 determination that the application has been granted a permission which
9 requires implementation of a particular exemption mechanism, whether

10 said exempt encryption limitations allow said particular exemption
11 mechanism to be implemented; and
12 instructions for causing one or more processors to derive, in response to a
13 determination that said exempt encryption limitations allow said particular
14 exemption mechanism to be implemented, said restrictions from said set
15 of exempt encryption limitations.

1 59. (Original) The computer readable medium of claim 43, wherein the system further
2 comprises a general implementation for said service, and wherein the instructions
3 for causing one or more processors to dynamically construct said customized
4 implementation comprises:
5 instructions for causing one or more processors to instantiate the general
6 implementation to give rise to a general implementation instance;
7 instructions for causing one or more processors to instantiate a wrapper object;
8 and
9 instructions for causing one or more processors to encapsulate said general
10 implementation instance and said restrictions within said wrapper object to
11 derive said customized implementation.

1 60. (Original) The computer readable medium of claim 59, wherein said wrapper
2 object comprises one or more invocable methods, wherein said general
3 implementation instance comprises one or more invocable methods, and wherein
4 the instructions for causing one or more processors to encapsulate comprises:
5 instructions for causing one or more processors to map one or more of the
6 invocable methods of said wrapper object to one or more of the invocable
7 methods of said general implementation instance.

1 61. (Original) The computer readable medium of claim 60, wherein said wrapper
2 object comprises initialization logic for enforcing said restrictions on said general
3 implementation instance.

1 62. (Original) The computer readable medium of claim 61, wherein said initialization
2 logic is invoked prior to allowing any of the invocable methods of said general
3 implementation instance to be invoked.

1 63. (Original) The computer readable medium of claim 59, further comprising:
2 instructions for causing one or more processors to instantiate an exemption
3 mechanism to give rise to an exemption mechanism instance; and
4 instructions for causing one or more processors to encapsulate said exemption
5 mechanism instance within said wrapper object.

1 64. (Previously Presented) The method of claim 1, wherein said framework comprises
2 Java Cryptography Extension to Java Platform.

1 65. (Previously Presented) The framework of claim 22, wherein said framework
2 comprises Java Cryptography Extension to Java Platform.

1 66. (Previously Presented) The computer readable medium of claim 43, wherein said
2 framework comprises Java Cryptography Extension to Java Platform.